

CLAIMS

1. A method of enabling a wireless information device operated by an end-user to access customer support services, the end-user having a support requirement, comprising
5 the steps of:
 - (a) opening a data connection between the device and a customer support computer;
 - (b) keeping the data connection open whilst the device progresses up a queue of an automated queuing system connected to the customer support computer;
 - 10 (c) initiating a predefined action before the device reaches the top of the queue or when the device reaches the top of the queue.
2. The method of Claim 1 in which the predefined action includes one or more of
15 the following:
 - (a) a customer service representative ('CSR') calling the end-user back with a voice call;
 - (b) causing data to be downloaded from the device;
 - (c) causing data or an application to be written to the device.
- 20 3. The method of Claim 1 or 2, in which the data connection is opened in response to input from the end-user, the input being a response to an on-screen dialog, prompt, free-text input, menu selection or icon, or speech input, that defines the support requirement.
- 25 4. The method of any preceding Claim in which the data connection remains active to enable the customer support computer to download data from the device or write data or applications to the device before the device reaches the top of the queue.
- 30 5. The method of any preceding Claim in which the device receives (and optionally displays) data sent over the data connection from the customer support computer which indicates the queue position and/or likely time before a customer service representative

will respond in person to the end-user by initiating a voice call or accessing the Wireless Information Device.

6. The method of any preceding Claim in which the device displays a visual
5 indication that the data connection is open.

7. The method of any preceding Claim in which the device displays a visual
indication of the queue position.

10 8. The method of any preceding Claim in which the device is automatically queried
by the customer support computer either before or when the device reaches the top of
the queue to obtain information relevant to the end-users support requirement.

15 9. The method of any preceding Claim in which the device automatically sends
information relevant to the end-users support requirement with an initial connection
message.

10. The method of Claim 8 or 9 in which the information includes one or more of
the following kinds of information:

- 20 (a) Any or all of device's phone number, International Mobile Equipment Identifier (IMEI) or International Mobile Subscriber Identifier (IMSI);
- (b) recent key strokes;
- (c) recent remote web or WAP sites visited by the device;
- (d) current state of the device, including operating system, application/configuration settings, applications, battery status, memory status, dropped calls;
- 25 (e) end-user's name;
- (f) end-user's address;
- (g) end-user's bank, credit and/or charge card details;
- (h) end-user's password;
- 30 (i) goods and/or services recently requested or acquired by the end-user using the device;
- (j) device usage profile or data;

- (k) device geographic location data;
- (l) device error logs;
- (m) identification of all programs running on the device;
- (n) device data to be backed-up or replicated.

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11. The method of Claim 10 in which the device displays a user prompt requiring the end-user to consent to specifically requested kinds of information being sent to the customer support computer.

10 12. The method of Claim 11 in which the end-user prompt requires the end-user to satisfy an access control process before releasing the information to the customer support computer.

15 13. The method of Claim 2 in which the CSR calls the end-user for one of the following reasons: to inform the end-user that the support request has been completed, to better understand the nature of the support requirement and to discuss how to fulfil the support requirement.

20 14. The method of any preceding Claim in which it is determined, without explicit notification by the end-user, that the end-user requires support and the data connection is then opened.

25 15. The method of Claim 14 in which it is determined that the end-user has a support requirement when a problem is identified with a component of the end-user's service on the device.

16. The method of Claim 14 in which it is determined that the end-user has a support requirement when a problem is detected in the end-user's use of a particular service.

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17. The method of Claim 16 in which the problem is indicated by one or more of the following: above-average rate of dropped calls, shorter-than-average battery life, or failed application transactions.

18. A wireless information device operated by an end-user, the device being programmed with software that enables the device to:

- 5 (a) open a data connection between the device and a customer support computer;
- (b) keep the data connection open whilst the device progresses up a queue of an automated queuing system connected to the customer support computer;
- 10 (c) allow a predefined action that meets the support requirement before the device reaches the top of the queue or when the device reaches the top of the queue.

19. The device of Claim 18 in which allowing the predefined action includes one or more of the following:

- 15 (a) accepting a voice call from a customer service representative;
- (b) allowing data to be downloaded from the device;
- (c) allowing data or an application to be written to the device.